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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/327,744	10/24/94	STONE M	3309P-65

QM12/0815

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EXAMINER	
GOODMAN, C	
ART UNIT	**PAPER NUMBER**
3724	25

DATE MAILED: 08/15/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 08/327,744	Applicant(s) STONE ET AL.	
	Examiner Charles Goodman	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

1)☒ Responsive to communication(s) filed on *23 October 1998* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)☐ All b)☐ Some * c)☐ None of the CERTIFIED copies of the priority documents have been:

1.☐ received.

2.☐ received in Application No. (Series Code / Serial Number) _____ .

3.☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

DETAILED ACTION

1. In view of the Appeal Brief filed on October 23, 1998, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(a) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(b) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The After Final Amendment filed on October 22, 1996 has been entered, since this amendment has been approved entry for Appeal purposes in the Advisory Action, Paper No. 13.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over McComas in view of Shiembob, Ryan, or Ackerman.

McComas discloses the invention substantially as claimed including the inherent step of having the liquid stream striking the substrate at the base of the coating 1 (analogous to the claimed honeycomb) due to, *inter alia*, the relative motion between the component and the liquid stream 5 and the fact that McComas removes both the coating and the bond coating 2 (analogous to the claimed braze) *simultaneously*. See Figs. 1-1A, c. 1, l. 19 - c. 3, l. 66. Although McComas lacks a honeycomb as the form of the coating, McComas does teach that the method encompasses removal of *abradable seals* which are used in gas turbine engines. See *Id.*, c. 1, ll. 19-25. Regarding the honeycomb, Shiembob, Ryan, and Ackerman all teach that a honeycomb, braze, and substrate is a well known abradable seal in the art for gas turbine engines. More specifically, Shiembob teaches an insulated honeycomb seal for gas turbine engines comprising a honeycomb 2 that is inherently brazed onto a substrate 18. See whole patent. Ryan teaches another abradable seal for gas turbine engines comprising a honeycomb 2 brazed onto a substrate 1. See whole patent. Ackerman teaches a further example of an abradable seal comprising a honeycomb 28 which is inherently brazed onto a substrate (not designated by reference but see Fig. 1). See whole patent. Thus, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the method of McComas with the honeycomb as taught by

either Shiembob, Ryan, or Ackerman in order to facilitate the removal of the same from the substrate during maintenance, since as noted above, the honeycomb is another form of an abradable seal that is a "coating" for which McComas method is to be applied.

6. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiembob, Ryan, or Ackerman in view of McComas.

Shiembob, Ryan, or Ackerman all disclose various forms of abradable seals for gas turbine engine comprising a honeycomb, braze, and substrate structure. See *Id.* However, none of these references teach the method of removal of the honeycomb and braze from the substrate. In that regard, McComas teaches that it is common practice in the art to perform routine engine maintenance which frequently requires removal of coatings in the abradable seals. See *Id.*, c. 1, ll. 60-67. McComas specifically teaches a method of removing a coating 1 and bond coating 2 that is an abradable seal from a substrate comprising all the method steps claimed, i.e. flow, pressure, and angle of the liquid stream 5, including the inherent step of having the liquid stream striking the substrate at the base of the coating, since, *inter alia*, this striking position is the obvious position that facilitates simultaneous removal of the coating and bond coating from the substrate, this method facilitating easy removal without damaging the substrate. Thus, it would have been obvious to the ordinary artisan at the time of the instant invention to apply the liquid removal method of McComas to the abradable honeycomb seals of either Shiembob, Ryan, or Ackerman in order to facilitate easy removal of the honeycomb and braze without damaging the substrate whenever maintenance requires the same, since as taught by McComas, abradable seals is just another form of coating that is subject to removal of the same during maintenance.

Response to Arguments

7. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on May 21, 1996 (Paper No. 9) prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Goodman whose telephone number is (703) 308-0501. The examiner can normally be reached on Monday-Thursday between 7:30 AM to 6:00 PM

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada, can be reached on (703) 308-2187. The fax phone number for this Group is (703) 305-3579.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**rinaldi.rada@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Charles Goodman
Patent Examiner
AU 3724

Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700

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August 10, 2000